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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,609	09/15/2003	Chih-Yang Pai	TSM03-0146	2342
43859	7590	04/20/2005	EXAMINER	
SLATER & MATSIL, L.L.P. 17950 PRESTON ROAD, SUITE 1000 DALLAS, TX 75252			LE, THAO X	
			ART UNIT	PAPER NUMBER
			2814	

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/662,609

Applicant(s)

PAI ET AL.

Examiner

Thao X. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 1-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 24-33 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5674770 to Lee et al.

Regarding claim 24, Lee discloses a method of forming a semiconductor device, the method comprising: forming a cell gate oxide 3 (left portion), fig. 1, column 3 line 6, in a cell region; forming a logic gate oxide 3 (right portion), fig. 1, in a periphery region, forming a first doped polysilicon layer 4, column 3 lines 10 and 14, fig. 1, on the cell gate oxide 3; and forming a second polysilicon layer 7, column 3 line 39, fig. 3, the second polysilicon layer being on the logic gate oxide 3 in the peripheral region and on the first doped polysilicon layer 4 in the cell region.

Regarding claims 25-26, 30, and 32-33 Lee discloses the method of claim 24 wherein the second polysilicon layer 7 positioned above the cell gate oxide 3 is a p-type doped polysilicon, the second polysilicon layer is doped with a material selected from the group consisting essentially of phosphorous, nitrogen, arsenic, and antimony, column 3 line 46

Regarding claims 27-28, Lee discloses the method of claim 24 wherein the step of forming a first polysilicon layer 4 is performed by depositing by furnace an in-situ doped polysilicon, column 3 line 15, wherein depositing by furnace is performed at a temperature of about 540⁰C to about 640⁰C, column 3 line 13.

Regarding claim 29, Lee discloses the method of claim 24 wherein the second polysilicon layer 7 is formed of undoped polysilicon, column 3 line 45.

Regarding claim 31, Lee discloses the method of claim 30 further comprising the step of doping the second polysilicon layer 7 located above the logic gate oxide with an n-type dopant, column 5 lines 5-10. Inherently, Lee discloses layer 7 can be doped with either N-type or P-type dopant.

Response to Arguments

3. Applicant's arguments filed on 08 Mar. 2005 have been fully considered but they are not persuasive. The Applicant argues that Lee does not disclose the second polysilicon layer is formed ON the logic gate oxide in the peripheral region and ON the first doped polysilicon layer in the cell region. This is not persuasive because in fig. 3 Lee clearly shows the second polysilicon layer 7 is being formed ON the logic gate oxide 3 in the peripheral and on the first doped polysilicon layer 4 in the cell region response. Apparently, the Applicant argues that the reference fails to show certain feature of Applicant's invention, it is noted that the feature upon which the Applicant relies on, i.e. the second polysilicon layer is in contact with the logic oxide gate in the peripheral, are not recited in the rejected claim. Although the claim are interpreted in

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light of the specification, limitation from the specification are not read into the claim, see *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore, it is proper to use the specification to interpret what the applicant meant by a word or phrase recited in the claim. However, it is not proper to read the limitations appearing in the specification into the claim when these limitations are not recited in the claim; *Intervet America Inc. v. Kee-Vet Lab. Inc.*, 887 F.2d 1050, 1053, 12 USPQ2d 1474, 1476 (Fed. Cir. 1989). It is well settled that, during examination proceedings, claims are given their broadest reasonable interpretation. *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). In this case, the word 'ON' is being interpreted as a unction word to indicate position in close proximity with in according Merriam Webster's Collegiate Dictionary Tenth Edition.; therefore the second polysilicon layer 7 of Lee read on the claim limitation.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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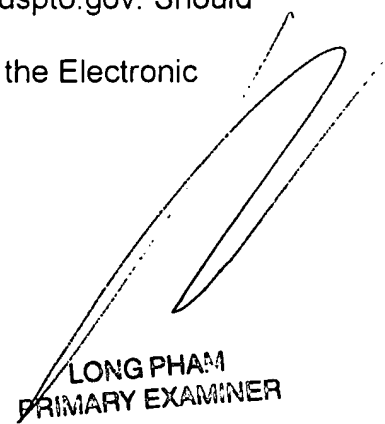
shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao X. Le whose telephone number is (571) 272-1708. The examiner can normally be reached on M-F from 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael M. Fahmy can be reached on (571) 272 -1705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thao X. Le
15 April 2005



LONG PHAM
PRIMARY EXAMINER